STUDIES IN THE THEACEAE, XXXV TWO NEW SPECIES OF TERNSTROEMIA FROM THE LESSER ANTILLES ¹

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Ternstroemia proctoriana, spec. nov.

Materiari-arbor grandis, 25-30 m. alta, ramulis crassis teretibus brunneis. Folia subcoriacea, obovata, 8-12 cm. longa, 3-5.5 cm. lata, apice rotundata vel late obtusa, basi cuneata, margine subintegerrima, costa supra canaliculata, subtus elevata, venis ca. 10-paribus subobscuris, petiolis ca. 1 cm. longis. Flores axillares vel apice ramulorum congesti; pedicellis ca. 1 cm. longis; bracteolis 2, oppositis, inaequalibus, decurrentibus, eglandularibus, 2-2.5 mm. longis, 1.5-2 mm. latis; sepalis 5, imbricatis, albidis, ovatis, apice subrotundatis, inaequalibus, 6-7 mm. longis, 4.5-5 mm. latis, margine integerrimis; petalis 5, aureis, inaequalibus, extus duobus ovatis, 9-10 mm. longis, 4.5-5 mm. latis, intus tribus longe ovatis, 9-10 mm. longis, 2.75-3 mm. latis, apice subapiculatis; staminibus uniseriatis, ca. 15, inaequalibus, 5 longis (8.5-9 mm.), 10 brevioribus (ca. 6 mm.), filamentis 2-3 et 1-1.5 mm. longis, subcrassis; antheris 4-5 mm. et 3-3.5 longis, connectivis attenuatis, 1.5-2.5 et 1.5 mm. projectis; ovario subgloboso vel subconico, ca. 3 mm. diam., 3-loculato (subinde 5- vel 6loculato apparento), loculis 2-ovulatis; stylo attenuato, ca. 4 mm. longo, basi subcrasso; stigmate punctiformi. Fructus non visi.

St. Lucia: Forestière district, ca. 1 mile due southeast of Trois Pitons, ca. 1100 ft., G. R. Proctor 18229 (A, holotype; IJ, isotype), June 9, 1958 (large timber tree; sepals white, petals yellow; "merise").

Mr. George R. Proctor, the collector of the type specimen and for whom the species is named, told me that this species, although not common, was one of the large timber trees of the area. Several characters are very distinctive. The sepals are white in the fresh state, while the corolla is clearly a sharp, deep yellow. Both of these colors are unusual in *Ternstroemia*. In the majority of species, the sepals are reddish brown and the corolla white or creamy white.

The stamens, about fifteen in number, are arranged in a single series with five long stamens and ten shorter ones. The five long stamens are located between the petals with two short stamens alternating with each long one. Irregularity in the size of the stamens is very characteristic in the genus. However, this is the first time that I have recognized a definite pattern, especially in a single series arrangement. In a multiseriate ar-

¹ See also "Studies in the Theaceae, XIV. Notes on the West Indian species of *Ternstroemia*," Jour. Arnold Arb. 24: 60–76. 1943, and "A New Species of *Ternstroemia* from Jamaica, B. W. I.," Rhodora 59: 36–38. 1957.

rangement one finds the longer stamens in the outer series and the shorter stamens in the inner, with a gradation in size from the outer to the inner series. In some flowers there were sixteen, and even eighteen, stamens. The variation in number was found in the shorter stamens.

The arrangement of the locules of the ovary might appear confusing. Actually, there are three locules to the ovary with two ovules in each. However, cross-sections nearer the top of the ovary show what appear to be five locules or six locules with a single ovule in each. In the latter situation the placentae appear joined to the locule wall giving a six-loculate appearance. Not having seen the fruit, one can hardly conjecture what the appearance of a cross-section might be. Often the seeds grow to a size completely filling the locules, sometimes causing the placentae, as well as the locule walls, to be distorted.

The bracteoles beneath the calyx are distinctly decurrent the entire length of the pedicel. When one attempts to remove the bracteoles, a strip of tissue adheres to the base of the bracteole. In this instance no scar is left on the pedicel, as is usually the case.

Ternstroemia sanctaluciae, spec. nov.

Arbor 3-4 m. alta, ramulis teretibus griseis. Folia coriacea, obovata, apice ramulorum congesta, 4-6 cm. longa, 1.5-2 cm. lata, apice rotundata; basi in brevissimis (ca. 3 mm.) petiolis attenuata, margine in sicco revoluta, integerrima, pauce minuta glanduloso-denticulata, costa supra canaliculata, subtus elevata, venis ca. 5-paribus. Flores solitarii, pedicellis ca. 2 cm. longis; bracteolis 2, oppositis, inaequalibus, extus ovato, 3 × 2 mm., apice acuto, apice apiculato; intus subdeltoideo, 3 × 3 mm., eglandulari; sepalis 5, imbricatis, inaequalibus, exterioribus duobus ovatis, ca. 8 mm. longis et 6 mm. latis, interioribus tribus 9-10 mm. longis, 7-8 mm. latis, subrotundatis, apice retrorse apiculatis, margine integerrimis; petalis 5, 7.5-8 mm. longis 3.5-4 mm. latis, basi connatis, supra aureis, subtus roseis; stamina ca. 50, triseriatis, inaequalibus, 6-8 mm. longis, filamentis 1-1.5 mm. longis, basi ad corollam adnatis, antheris 2.5-4 mm. longis, oblongis, connectivo longe caudato, 1.5-2.5 mm. projecto; pistillo ca. 9 mm. longo, ovario conico vel subgloboso, ca. 3 mm. longo, 2-loculato, loculis pauciovulatis, stylo attenuato, ca. 6 mm. longo, stigmate punctiformi. Fructus ignotus.

St. Lucia. Vicinity of Linnis Point, south of Dennery, ca. 100 ft., scrub woodland near sea-cliffs, G. R. Proctor 18041 (A, holotype; IJ, isotype), May 17, 1958 (tree 3.5 m. tall).

Ternstroemia sanctaluciae differs from the preceding species, T. proctoriana, primarily in the number of locules in the ovary and the number of stamens arranged in three series. Another difference is that the bracteoles of this species are not decurrent and when removed leave scars. While in the preceding species the corolla is colored a deep yellow throughout, in T. sanctaluciae the upper half of the petals exhibits the same color but the lower half is a distinct pink in the fresh state, drying a rather dark red.